

**REMARKS/ARGUMENTS**

The Office Action mailed February 6, 2008, has been received and reviewed. Claims 1-15 are currently pending in the application. Claims 1-15 stand rejected. Applicant has amended claim 5, and respectfully requests reconsideration of the application as amended herein.

**35 U.S.C. § 101 Rejection**

Claims 5 and 6 stand rejected under 35 U.S.C. § 101, asserting that the claimed invention is directed to non-statutory subject matter. Applicant has amended independent claim 5 to recite, in part, “A method for forming a communication signal for transmitting via a carrier wave, comprising: ....” Therefore, Applicant is no longer claiming a “signal” per se. Accordingly, amended independent claim 5 reciting a “method for forming a communication signal” falls within one of the statutory classes, namely a “process”.

Regarding dependent claim 6, claim 6 recites a “method” which now finds antecedent basis in amended independent claim 5 from which claim 6 depends. Accordingly, Applicant respectfully requests the rejections be withdrawn.

**35 U.S.C. § 112 Claim Rejection**

Claim 6 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant respectfully traverses this rejection, as hereinafter set forth.

The Office Action cites the “method” preamble limitation of dependent claim 6 while no antecedent basis exists for the method. Applicant has amended independent claim 5 from which claim 6 depends to recite, in part, “A method for forming a communication signal for transmitting via a carrier wave, comprising: ....” Therefore, the “method” preamble of dependent claim 6 now finds antecedent basis in amended independent claim 5. Therefore, Applicant respectfully requests the rejection be withdrawn.

### **Claim Rejections Under 35 U.S.C. § 103**

Claims 1-15 were rejected as being unpatentable over U.S. Patent 6,542,490 to Ahmadvand *et al* (“Ahmadvand”) in view of U.S. Patent 6,032,197 to Birdwell *et al* (“Birdwell”). Applicant respectfully traverses this rejection, as hereinafter set forth.

To establish a *prima facie* case of obviousness the prior art reference (or references when combined) **must teach or suggest all the claim limitations**. *In re Royka*, 490 F.2d 981, 985 (CCPA 1974); *see also* MPEP § 2143.03. Additionally, there must be “a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements” in the manner claimed. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742, 167 L.Ed.2d 705, 75 USLW 4289, 82 U.S.P.Q.2d 1385 (2007). Finally, to establish a *prima facie* case of obviousness there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Furthermore, the reason that would have prompted the combination and the reasonable expectation of success must be found in the prior art, common knowledge, or the nature of the problem itself, and not based on the Applicant’s disclosure. *DyStar Textilfarben GmbH & Co. Deutschland KG v. C. H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006); MPEP § 2144. Underlying the obvious determination is the fact that statutorily prohibited hindsight cannot be used. *KSR*, 127 S.Ct. at 1742; *DyStar*, 464 F.3d at 1367.

The 35 U.S.C. § 103(a) obviousness rejections of claims 1-15 are improper because the elements for a *prima facie* case of obviousness are not met. Specifically, the rejection fails to meet the criterion that the prior art references must teach or suggest all the claims limitations.

The Examiner, in the Response to Arguments section, acknowledges that Birdwell’s “16-bit protocol block 42 identifies the protocol format for the header 40”. (Office Action, p. 7; emphasis added). The Examiner then alleges that the “16-bit protocol block can have different formats as suggests by Birdwell, such as TCP/IP, IPX/SPX, and NetBEUI”. (Office Action, p. 7; emphasis added). Note-Birdwell specifically teaches “A 16-bit protocol block 42 identifies the protocol format for the header 40 [In this case, the protocol block 42 contains the protocol number “0x0800”, which specifies the UDP/IP protocol.]” (Birdwell, col. 4, lines 55-58).

The Examiner then alleges “using these different *format headers* 42 the payload of the packet will be constructed according to the protocol format of the header.” (Office Action, p. 7; emphasis added). Applicant agrees that Birdwell teaches, for example, “the *protocol block* 42 contains the protocol number “0x0800”, which *specifies the UDP/IP protocol*.” (Birdwell, col. 4, lines 57-58; emphasis added). However, Applicant respectfully asserts that “specifying] ... [a] protocol” does not teach Applicant’s claimed element of “*identifying a payload type*”. Specifically, Birdwell’s actual “protocol” and “payload” teachings include “specifying] ... [a] protocol” which includes identifying header fields and field lengths (see Birdwell, col. 4, line 54-col. 5, line 41) and associating an X-bit data payload to the header (see Birdwell, col. 5, lines 53-58). No where does Birdwell teach that “specifying] ... [a] protocol” also further teaches “*identifying a payload type*” as claimed by Applicant. Even assuming for the sake of argument that Birdwell’s teaching of “specifying] ... [a] protocol” extends to teaching the “size” of the X-bit data payload, Birdwell’s teaching of “specifying] ... [a] protocol” clearly does not teach “*identifying a payload type*” as claimed by Applicant. Specifically, the identification of a protocol format does not also teach “*identifying a payload type*” as claimed by Applicant.

Accordingly, these references cannot render obvious, under 35 U.S.C. §103, Applicant’s invention as presently claimed because Ahmadvand in view of Birdwell does not teach all of the claims limitations. Applicant submits that Ahmadvand in view of Birdwell does not render obvious, under 35 U.S.C. § 103, the presently claimed invention of (i) independent claim 1 and claims 2-4 and 11 depending therefrom, (ii) independent claim 5 and claim 6 depending therefrom, (iii) independent claim 7 and claims 8-10 depending therefrom, and (iv) independent claims 12-15, because Ahmadvand in view of Birdwell does not teach or suggest all of the claims limitations. Accordingly, Applicant respectfully further sustains the below arguments.

### **Claims 1, 12 and 14**

Applicant respectfully disagrees that Ahmadvand in view of Birdwell renders obvious Applicant’s invention as claimed in independent claims 1, 12 and 14 which read:

1. A method for framing packets in a wireless transmission system supporting broadcast transmissions, the method comprising:
  - generating a portion of an Internet Protocol (IP) packet for transmission;
  - appending a start of frame indicator to the portion of the IP packet;
  - applying an error checking mechanism to the portion of ***the IP packet not including a protocol field to identify a payload type;***
  - preparing a frame for transmission, having the start of frame indicator, the portion of the IP packet, and the error checking mechanism; and
  - transmitting the frame without the protocol field.*** (Emphasis added).
12. An apparatus for framing packets in a wireless transmission system supporting broadcast transmissions, the apparatus comprising:
  - means for generating a portion of an Internet Protocol (IP) packet for transmission;
  - means for appending a start of frame indicator to the portion of the IP packet;
  - means for applying an error checking mechanism to the portion of the IP packet;
  - means for preparing a frame for transmission, having the start of frame indicator, ***the portion of the IP packet*** and the error checking mechanism and ***not including a protocol field to identify a payload type;*** and
  - means for ***transmitting the frame without the protocol field.*** (Emphasis added).
14. A computer program stored on a computer-readable storage unit, the computer program for framing packets in a wireless transmission system supporting broadcast transmissions, the computer program comprising:
  - a first set of instructions for generating a portion of an Internet Protocol (IP) packet for transmission
  - a second set of instructions for appending a start of frame indicator to the portion of the IP packet;
  - a third set of instructions for applying an error checking mechanism to the portion of the IP packet;
  - a fourth set of instructions for preparing a frame for transmission, having the start of frame indicator, the portion of the IP packet and the error checking mechanism and ***not including a protocol field to identify a payload type;*** and
  - a fifth set of instructions for ***transmitting the frame without the protocol field.*** (Emphasis added).

Applicant respectfully asserts that Applicant's invention as presently claimed in independent claims 1, 12 and 14 recite, in part, "***not including a protocol field to identify a payload type***" and "***the frame without the protocol field***". The Office Action alleges:

Regarding claims 1, 12, and 14, ... *Ahmadvand fails to teach* for framing and transmitting ***IP packet not including a protocol field***.

However, *Birdwell discloses* a broadcast transmission system for transmitting IP packets using compress[ed] header, wherein ***the protocol field of the packet is not used in the compressed header*** (fig. 5 col. 5 lines 59-65). (Office Action, pp. 3-4; emphasis added).

Applicant respectfully asserts that Applicant's entire claim language has not been applied in the rejection. Generally, the alleged un-included "protocol" field in Birdwell is for identifying a "header" format and not a "payload type" as claimed by Applicant. Specifically, Applicant's invention as presently claimed in independent claims 1, 12 and 14 recite, in part, "**protocol field to identify a payload type**". However, the "protocol" field of Birdwell is completely unrelated to the payload type and applies to a "header" type. Specifically, Birdwell teaches with reference to Birdwell's Figs. 4-5:

A 16-bit ***protocol*** block ***42 identifies*** the protocol ***format for the header 40.*** (Birdwell, col. 4, lines 55-56; emphasis added).

Clearly, the "protocol field" 42 that is present in packet 50 of Birdwell's Fig. 4 and absent in packet 60 of Birdwell's Fig. 5 is not "a ***protocol field to identify a payload type***" as claimed by Applicant. Furthermore, Birdwell is clear that the field that identifies the "payload type" is present in both packet 50 of Birdwell's Fig. 4 and packet 60 of Birdwell's Fig. 5. In this regard, Birdwell specifically teaches:

The 16-bit ***packet identification field***, for example, ***is the same in both uncompressed headers [40 of Birdwell's Fig. 4] and compressed headers [62 of Birdwell's Fig. 5].*** (Birdwell, col. 5, lines 34-36; emphasis added).

Therefore, since by the Office Action's admission, "Ahmadvand fails to teach ... IP packet not including a protocol field" (Office Action, p. 3) and Birdwell's teaching that the "packet identification field [] is the same in both uncompressed headers and compressed headers" (Birdwell, col. 5, lines 34-36), these references, either individually or in any proper combination, do not teach or suggest Applicant's invention as presently claimed in independent

claims 1, 12 and 14 reciting, in part, “*not including a protocol field to identify a payload type*” and “the frame without the protocol field”.

Accordingly, these references cannot render obvious, under 35 U.S.C. §103, Applicant’s invention as presently claimed in independent claim 1 and claims 2-4 and 11 depending therefrom, and independent claims 12 and 14, because Ahmadvand in view of Birdwell does not teach or suggest all of the claims limitations.

**Claim 5**

Applicant respectfully disagrees that Ahmadvand in view of Birdwell renders obvious Applicant’s invention as claimed in independent claim 5 which reads:

5. A method for forming a communication signal for transmitting via a carrier wave, comprising:
  - generating a payload portion corresponding to a portion of an Internet Protocol (IP) packet of digital information and *not including a protocol field to identify a payload type*;
  - generating a start of frame portion corresponding to the payload portion, and identifying a status of the payload portion within an IP packet; and
  - generating an error checking portion for verifying the payload portion. (Emphasis added).

Applicant herein sustains the above-proffered arguments. Therefore, since by the Office Action’s admission, “Ahmadvand fails to teach … IP packet not including a protocol field” (Office Action, p. 3) and Birdwell’s teaching that the “packet identification field [] is the same in both uncompressed headers and compressed headers” (Birdwell, col. 5, lines 34-36), these references, either individually or in any proper combination, do not teach or suggest Applicant’s invention as presently claimed in independent claim 5 reciting, in part, “*not including a protocol field to identify a payload type*”.

Accordingly, these references cannot render obvious, under 35 U.S.C. §103, Applicant’s invention as presently claimed in independent claim 5 and claim 6 depending therefrom, because Ahmadvand in view of Birdwell does not teach or suggest all of the claims limitations.

**Claims 7, 13 and 15**

Applicant respectfully disagrees that Ahmadvand in view of Birdwell renders obvious Applicant's invention as claimed in independent claims 7, 13 and 15 which read:

7. A method for receiving framed packets in a wireless transmission system supporting broadcast transmissions, the method comprising:

receiving a frame of a packet transmission wherein the frame contains a payload portion of an Internet Protocol (IP) packet and ***does not include a protocol field to identify a payload type***, the frame having a start of frame portion, a payload portion, and an error check portion, ***the frame not including the protocol field***;

identifying the frame as a start frame in the packet transmission;  
verifying the frame using the error check portion of the frame; and  
processing the payload portion of the frame. (Emphasis added).

13. An apparatus for receiving framed packets in a wireless transmission system supporting broadcast transmissions, the apparatus comprising:

means for receiving a frame of a packet transmission wherein the frame contains a payload portion of an Internet Protocol (IP) packet and ***does not include a protocol field to identify a payload type***, the frame having a start of frame portion, a payload portion, and an error check portion, ***the frame not including the protocol field***;

means for identifying the frame as a start frame in the packet transmission;  
means for verifying the frame using the error check portion of the frame; and  
means for processing the payload portion of the frame. (Emphasis added).

15. A computer program stored on a computer-readable storage unit, the computer program for receiving framed packets in a wireless transmission system supporting broadcast transmissions, the computer program comprising:

a first set of instructions for receiving a frame of a packet transmission wherein the frame contains a payload portion of an Internet Protocol (IP) packet and ***does not include a protocol field to identify a payload type***; the frame having a start of frame portion, a payload portion, and an error check portion, ***the frame not including the protocol field***;

a second set of instructions for identifying the frame as a start frame in the packet transmission;

a third set of instructions for verifying the frame using the error check portion of the frame; and

a fourth set of instructions for processing the payload portion of the frame.  
(Emphasis added).

Applicant herein sustains the above-proffered arguments. Therefore, since by the Office Action's admission, "Ahmadvand fails to teach ... IP packet not including a protocol field" (Office Action, p. 4) and Birdwell's teaching that the "packet identification field [] is the same in both uncompressed headers and compressed headers" (Birdwell, col. 5, lines 34-36), these references, either individually or in any proper combination, do not teach or suggest Applicant's invention as presently claimed in independent claims 7, 13 and 15 reciting, in part, "*does not include a protocol field to identify a payload type*".

Accordingly, these references cannot render obvious, under 35 U.S.C. §103, Applicant's invention as presently claimed in independent claim 7 and claims 8-10 depending therefrom, and independent claims 13 and 15 because Ahmadvand in view of Birdwell does not teach or suggest all of the claims limitations.

**CONCLUSION**

Claims 1-15 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact Applicant's undersigned attorney.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Date: May 6, 2008

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